

### **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in this application.

### **Listing of Claims:**

Claims 1-10 (canceled)

Claim 11 (currently amended): A bulk quantity of cyclosporin in an amount of about 1 kg or more produced by a process which comprises purifying on a large scale a product from a feedstock containing one or more impurities having closely-related physical properties to the product, which process comprises feeding the feedstock into an extraction column under conditions adapted for separating more-or less-polar impurities from the feedstock, wherein a lighter phase flows counter to a heavier phase, thereby forming an output in one phase containing the product containing less more- or less-polar impurities so that the output contains the product in a substantially purified form, wherein the lighter phase comprises heptane and acetone or heptane and isopropanol, the heavier phase comprises water and acetone or water and isopropanol, and the product is a cyclosporin having a purity level of 99.5% or greater.

Claim 12 (previously presented): A cyclosporin of claim 11, wherein the lighter phase comprises about 25 wt-% n-heptane and about 75 wt-% acetone, or about 90 wt-% n-heptane and about 10 wt-% isopropanol.

Claim 13 (previously presented): A cyclosporin of claim 11, wherein the heavier phase comprises about 50 wt-% water and about 50 wt-% acetone, or about 68 wt-% water and about 32 wt-% isopropanol.

Claim 14 (currently amended): A bulk quantity of cyclosporin in an amount of about 1 kg or more produced by a process which comprises purifying on a large scale a product from a feedstock containing one or more impurities having closely-related physical properties to the product, which process comprises the steps of

a) feeding the feedstock into a first extraction column under conditions adapted for separating more-or less-polar impurities from the feedstock, wherein a lighter phase flows counter to a heavier phase, thereby forming a first output in one phase containing the product containing less more- or less-polar impurities, and

b) feeding the first output into a second extraction column under conditions adapted for separating less- or more-polar impurities respectively from the first output, wherein the lighter phase flows counter to the heavier phase, thereby forming in one phase a second output, so that that second output contains the product in a substantially purified form, wherein the lighter phase comprises heptane and acetone or heptane and isopropanol, the heavier phase comprises water and acetone or water and isopropanol, and the product is a cyclosporine having a purity level of 99.5% or greater.

Claim 15 (previously presented): A cyclosporin of claim 14, wherein the lighter phase comprises about 25 wt-% n-heptane and about 75 wt-% acetone, or about 90 wt-% n-heptane and about 10 wt-% isopropanol.

Claim 16 (previously presented): A cyclosporin of claim 14, wherein the heavier phase comprises about 50 wt-% water and about 50 wt-% acetone, or about 68 wt-% water and about 32 wt-% isopropanol.

Claim 17 (previously presented): A cyclosporin of claim 11, which is Cyclosporin A, Cyclosporin D or a derivative thereof, or Cyclosporin G or a derivative thereof.

Claim 18 (withdrawn): A countercurrent extraction column having between 100 and 200 compartments, and an overall efficiency of about 10 to 30%.

Claim 19 (previously presented): A bulk quantity of cyclosporin A with an impurity level of less than 0.5% by area using HPLC.

Claim 20 (canceled)

Claim 21 (currently amended): A bulk quantity of cyclosporin in an amount of about 1 kg or more produced by a process which comprises purifying a product from a feedstock containing one or more impurities having distribution co-efficients closely related to the product, which process comprises feeding the feedstock into an extraction column wherein a lighter phase flows counter to a heavier phase, thereby forming an output in one phase containing the product containing less said impurities so that the output contains the product in a substantially purified form, wherein the lighter phase is non-aqueous; the heavier phase is aqueous; and the product is Cyclosporin A, Cyclosporin B, Cyclosporin C, Cyclosporin D, Cyclosporin G, Cyclosporin L, or Cyclosporin U having a purity level of 99.5% or greater.

Claim 22 (previously presented): A cyclosporin of claim 21, wherein the lighter phase comprises heptane and acetone or heptane and isopropanol.

Claim 23 (previously presented): A cyclosporin of claim 21, wherein the heavier phase comprises 20-100% water.

Claim 24 (previously presented): A cyclosporin of claim 21, wherein the heavier phase further comprises acetone or isopropanol.

Claim 25 (previously presented): A cyclosporin of claim 21, wherein the lighter phase comprises about 25 wt-% n-heptane and about 75 wt-% acetone, or about 90 wt-% n-heptane and about 10 wt-% isopropanol.

Claim 26 (previously presented): A cyclosporin of claim 21, wherein the heavier phase comprises about 50 wt-% water and about 50 wt-% acetone, or about 68 wt-% water and about 32 wt-% isopropanol.

Claim 27 (previously presented): A cyclosporin of claim 21, wherein the product is Cyclosporin A, Cyclosporin D, or Cyclosporin G.

Claim 28 (previously presented): A cyclosporin of claim 21, wherein the column is a countercurrent extraction column having between 100 and 200 compartments, and an overall efficiency of about 10 to 30%.

Claim 29 (canceled)

Claim 30 (currently amended): A bulk quantity of cyclosporin in an amount of about 1 kg or more produced by a process which comprises purifying a product from a

feedstock containing one or more impurities having distribution co-efficients closely related to the product, which process comprises

a) feeding the feedstock into a first extraction column wherein a lighter phase flows counter to a heavier phase, thereby forming a first output in one phase containing the product containing less impurities, and

b) feeding the first output into a second extraction column under conditions wherein the lighter phase flows counter to the heavier phase, thereby forming a second output in one phase, so that the second output contains the product in a substantially purified form, wherein the lighter phase is non-aqueous; the heavier phase is aqueous; and the product is Cyclosporine A, Cyclosporine B, Cyclosporine C, Cyclosporine D, Cyclosporine G, Cyclosporine L, or Cyclosporine U having a purity level of 99.5% or greater.

Claim 31 (previously presented): A cyclosporin of claim 31, wherein the lighter phase comprises heptane and acetone or heptane and isopropanol.

Claim 32 (previously presented): A cyclosporin of claim 30, wherein the heavier phase comprises 20-100% water.

Claim 33 (previously presented): A cyclosporin of claim 30, wherein the heavier phase further comprises acetone or isopropanol.

Claim 34 (previously presented): A cyclosporin of claim 30, wherein the lighter phase comprises about 25 wt-% n-heptane and about 75 wt-% acetone, or about 90 wt-% heptane and about 10 wt-% isopropanol.

Claim 35 (previously presented): A cyclosporin of claim 30, wherein the heavier phase comprises about 50 wt-% water and about 50 wt-% acetone, or about 68 wt-% water and about 32 wt-% isopropanol.

Claim 36 (previously presented): A cyclosporin of claim 30, wherein the product is Cyclosporin A, Cyclosporin D, or Cyclosporin G.

Claim 37 (canceled)

Claim 38 (currently amended) A bulk quantity of cyclosporin in an amount of about 1 kg or more produced by a process which comprises purifying on a large scale a cyclopeptide product selected from the group consisting of Cyclosporin A, Cyclosporin D, or Cyclosporin G from a feedstock comprising the cyclopeptide product and at least one cyclopeptide other than the cyclopeptide product and which is selected from the group consisting of Cyclosporine A, Cyclosporine B, Cyclosporine C, Cyclosporine D, Cyclosporine G, Cyclosporine L, and Cyclosporine U having a purity level of 99.5% or

greater which process compromises feeding the feedstock into an extraction column under conditions adapted for separating the cyclopeptide other than the cyclopeptide product from the feedstock, wherein a lighter phase flows counter to a heavier phase, thereby forming an output in one phase containing the cyclopeptide product in a substantially purified form, wherein the lighter phase comprises heptane and acetone, and the heavier phase comprises water and acetone.

Claim 39 (previously presented): A cyclosporin of claim 38, wherein the extraction column is a countercurrent extraction column having between 100 and 200 compartments, and an overall efficiency of about 10 to 30%.

Claim 40 (canceled)

Claim 41 (previously presented): A cyclosporin of claim 38, wherein the lighter phase comprises about 25 wt-% n-heptane and about 75 wt-% acetone.

Claim 42 (previously presented): A cyclosporin of claim 38, wherein the heavier phase comprises about 50 wt-% water and about 50 wt-% acetone.

Claim 43 (currently amended): A bulk quantity of cyclosporin in an amount of about 1 kg or more produced by a process which comprises purifying on a large scale a

cyclopeptide product selected from the group consisting of Cyclosporin A, Cyclosporine D, or Cyclosporine G from a feedstock comprising the cyclopeptide product and at least one cyclopeptide other than the cyclopeptide product and which is selected from the group consisting of Cyclosporine A, Cyclosporine B, Cyclosporine C, Cyclosporine D, Cyclosporine G, Cyclosporine L, and Cyclosporine U, which process comprises the steps of

a) feeding the feedstock into a first extraction column under conditions adapted for separating the cyclopeptide other than the cyclopeptide product from the feedstock, wherein a lighter phase flows counter to a heavier phase, thereby forming a first output in one phase containing the cyclopeptide product and containing less of the cyclopeptide other than the cyclopeptide product than is contained in the feedstock fed into the first extraction column, and

b) feeding the first output into a second extraction column under conditions adapted for separating the cyclopeptide other than the cyclopeptide product from the first output, wherein the lighter phase flows counter to the heavier phase, thereby forming in one phase a second output, so that the second output contains cyclopeptide product ~~in a substantially purified form~~ having a purity level of 99.5% or greater, wherein the lighter phase comprises heptane and acetone or heptane and isopropanol, and the heavier phase comprises water and acetone.

Claim 44 (previously presented): A cyclosporin of claim 43, wherein the lighter phase comprises about 25 wt-% n-heptane and about 75 wt-% acetone.



Claim 45 (previously presented): A cyclosporin of claim 43, wherein the heavier phase comprises about 50 wt-% water and about 50 wt-% acetone.

Claim 46 (previously presented): A bulk quantity of cyclosporin in an amount of about 1 kg or more, produced by a process which comprises purifying on a large scale Cyclosporine A from a feedstock comprising the Cyclosporine A and at least one impurity selected from the group consisting of derivatives of Cyclosporine B, Cyclosporine C, Cyclosporine D, Cyclosporine G, Cyclosporine L, and Cyclosporine U, which process comprises feeding the feedstock into an extraction column under conditions adapted for separating the impurity from the feedstock, wherein a lighter phase flows counter to a heavier phase, thereby forming an output in one phase containing the Cyclosporine A in a substantially purified form, having a purity level of 99.5% or greater wherein the lighter phase comprises heptane and acetone, and the heavier phase comprises water and acetone.

Claim 47 (previously presented): A cyclosporine of claim 46, wherein

a) the feedstock is fed into a first extraction column under conditions adapted for separating the impurity from the feedstock, wherein the lighter phase flows counter to the heavier phase, thereby forming a first output in the heavier phase comprising the Cyclosporine A and less of the impurity than was contained in the feedstock fed into the first extraction column and

b) the first output is fed into a second extraction column under conditions adapted for separating the impurities from the first output, wherein the lighter phase

flows counter to the heavier phase, thereby forming a second output in the lighter phase comprising the Cyclosporine A in substantially purified form.

Claim 48 (currently amended): A cyclosporin of claim 47, wherein the lighter phase comprises about 25 wt-% n-heptane and about 75 wt-% acetone, and the heavier phase comprises about 50 wt-% water and about 50 wt-% acetone.